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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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08/27/2001

Nobuyuki Goto

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2735

21395

7590

05/03/2006

LOUIS WOO
LAW OFFICE OF LOUIS WOO
717 NORTH FAYETTE STREET
ALEXANDRIA, VA 22314

EXAMINER

TOPGYAL, GELEK W

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/938,577	GOTO ET AL.	
	Examiner	Art Unit	
	Gelek Topgyal	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments with respect to claims 3, 5 and 8, have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3-5, and 8, are rejected under 35 U.S.C. 103(a) as being unpatentable over Vallone (US 6,847,778) in view of Geer (US 6,778,882).

Regarding claim 3, Vallone teaches a program-signal recording and reproducing apparatus for recording a program signal on a recording medium, and reproducing an already-recorded portion of the program signal, which is being recorded on the recording medium, the apparatus comprising:

- time information generating means for generating time information in accordance with lapse of time (Col. 22, lines 20-33 teaches that the display information includes the means for generation of time);
- recording means for recording the time information generated by the time information generating means or time information indicating time at which the program signal is broadcasted on the recording medium together with the program signal (Vallone teaches in col. 21, lines 29-32 that the program guide

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- information, which includes the broadcast time (start and stop time) and the current time, is recorded onto the same medium as that of the program signal);
- a head retrieval command input means for performing a program head retrieval command (Vallone teaches in col. 19, lines 26-27 a jump button 1414 and a replay button 1415 on the remote control that allows for program retrieval);
 - and first head retrieval reproduction means for, when the program head retrieval command is performed by the head retrieval command input means, obtaining present time information generated by the time information generating means (Vallone teaches col. 22, lines 20-33 that the display information includes the means for generation of time) and performing head retrieval reproduction of the program signal recorded. (Col. 19, lines 26-27, teaches a replay button 1415 that allows the user to jump back in time to play a section previous to the current time.)

But, Vallone fails to expressly teach the newly added limitation that reproduction of the program takes place at one of (1) time of 00-minute or in an hour and (2) time of 30-minute in an hour which is previous to the present time represented by the obtained present time information, and which is closer to the present time than the other is.

In an analogous art, Geer teaches that during automatic recording of selected channels, a user has the option to start viewing the program at the beginning of the program before the recording has completed by using buttons 1430 and 1450 to select a desired program and then pressing button 1410 to

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commence the reproduction. The programs as set by the program guide data start at either top half or the bottom half of the hour, the 00-th and 30-th minute, respectively, and therefore allows the user to jump back to the beginning of a TV program previous to the current time. It is clear that if the user wishes to watch a previously recorded show prior to the currently recording show, he will press button 1450 twice before being able to view the recorded show, and therefore the nature of being able to reproduce a program at 00-th minute and the 30-th minute in an hour which is closer to the present time than the other is, is preserved. (See Fig. 9, Fig. 14, elements 1420, 1430, 1450, and col. 8, line 1 – col. 9, line 43)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the start of program retrieval as taught by Geer into Vallone's recording apparatus because it allows a user an easy and convenient way to retrieve the beginning of a recorded or a currently recording program.

Regarding claim 5, Vallone teaches a program-signal recording and reproducing apparatus comprising:

- first means for recording a program signal on a recording medium (Vallone teaches in col. 4, lines 38-40, that the program is recorded on a medium);
- second means for generating first time information representing the present time (Vallone teaches in col. 22, lines 20-33 of display information which includes the means for generation of present time);

- third means for generating second time information representing one of (1) a time at which the program signal was recorded by the first means (Vallone teaches in col. 12, lines 36-40, that when recording a particular program, information about when it was recorded can be recorded onto a medium) and (2) a time at which the program signal was broadcasted (In col. 21, lines 29-32, Vallone describes that the program guide information, which includes the broadcast time (start and stop time), is recorded onto a medium, the same medium where the program is stored. Col. 22, lines 20-33 describes that the program guide information is read from the medium and used to generate the broadcast time);
- fourth means for determining a specified time point which precedes the present time represented by the first time information generated by the second means (Vallone teaches in col. 19, lines 26-27 a jump button 1414 and a replay button 1415 on the remote control that allows for program retrieval);
- and fifth means for finding a segment of the program signal on the recording medium according to the specified time point determined by the fourth means and the second time information generated by the third means, the program-signal segment relating to the second time information corresponding to the specified time point, and for reproducing the found segment and subsequent segments of the program signal from the recording medium (Vallone teaches in col. 19, lines 26-27 of a replay button 1415 that allows the user to jump back in time to play a section and the subsequent segments previous to the current time).

- But Vallone fails to expressly disclose the newly added limitation that the reproduction of the program takes place at the specific time point corresponding to one of (1) time whose minute part is 00 and (2) time whose minute part is 30 which is closer to the present time than the other is.

In an analogous art, Geer teaches that during automatic recording of selected channels, a user has the option to start viewing the program at the beginning of the program before the recording has completed by using buttons 1430 and 1450 to select a desired program and then pressing button 1410 to commence the reproduction. The programs as set by the program guide data start at either top half or the bottom half of the hour, the 00-th and 30-th minute, respectively, and therefore allows the user to jump back to the beginning of a TV program previous to the current time. It is clear that if the user wishes to watch a previously recorded show prior to the currently recording show, he will press button 1450 twice before being able to view the recorded show, and therefore the nature of being able to reproduce a program at 00-th minute and the 30-th minute in an hour which is closer to the present time than the other is, is preserved. (See Fig. 9, Fig. 14, elements 1420, 1430, 1450, and col. 8, line 1 – col. 9, line 43)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the start of program retrieval as taught by Geer into Vallone's recording apparatus because it allows a user an easy and convenient way to retrieve the beginning of a recorded or a currently recording program.

Regarding claim 8, Vallone teaches a program-signal recording and reproducing apparatus comprising:

- first means for recording a first program signal on a recording medium while leaving only a latest temporally-continuous portion of the first program signal in the recording medium as a cached portion (Vallone teaches in col. 5 lines 26-40 of four DMA engines that have circular storage buffers which stores only a finite amount of video and data);
- second means for generating first time information representing the present time (In col. 22, lines 20-33, Vallone describes display information which includes the means for generation of present time);
- third means for generating second time information representing one of (1) a time at which the first program signal was recorded by the first means and (2) a time at which the first program signal was broadcasted (In col. 21, lines 29-32, Vallone describes that the program guide information, which includes the broadcast time (start and stop time), is recorded onto a medium, the same medium where the program is stored. Col. 22, lines 20-33 describes that the program guide information is read from the medium and used to generate the broadcast time);
- fourth means for determining a specified time point which precedes the present time represented by the first time information generated by the second means (Vallone teaches in col. 19, lines 26-27 a jump button 1414 and a replay button 1415 on the remote control that allows for program retrieval for bookmarked

frames and already recorded frames, respectively, which are point in time prior to the current time);

- fifth means for accepting a head-retrieval command (Vallone teaches in Fig. 14 of a replay button 1415 on the remote control 1401 that a user can function).
- sixth means responsive to the head-retrieval command accepted by the fifth means for finding a segment of the latest temporally-continuous portion of the first program signal on the recording medium according to the specified time point determined by the fourth means and the second time information generated by the third means, the program-signal segment relating to the second time information corresponding to the specified time point, and for reproducing the found segment and subsequent segments of the program signal from the recording medium during a cache playback mode of operation (Vallone teaches in col. 19, lines 27-32 that when a user is watching live TV, the option to play a buffered/cached portion is available in the same manner as an instant replay operation in sports. The replay button 1415 displays the segment and its subsequent segments from a previous time point);
- seventh means for recording a second program signal on the recording medium in response to a designated record start timing (Vallone teaches in col. 20 lines 23-31 that multiple tuners incorporated into the system will allow for recording of multiple programs);
- and eighth means responsive to the head-retrieval command accepted by the fifth means for reproducing the second program signal from the recording

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medium during a time shift playback mode of operation (Vallone teaches in col. 19, lines 27-32 that when a user is watching live TV, the option to play a buffered/cached portion is available in the same manner as an instant replay operation in sports. The replay button 1415 displays the segment and its subsequent segments from a previous time point. The number of tuners dictate the number of programs that can be simultaneously recorded, and therefore, in the case of a two tuner system, the user could switch between two separate programs that are simultaneously recorded and therefore apply the replay button 1415 to either currently recording programs).

- Furthermore, Vallone fails to expressly disclose the newly added limitation that the reproduction of the program takes place at the specific time point corresponding to one of (1) time whose minute part is 00 and (2) time whose minute part is 30 which is closer to the present time than the other is.

In an analogous art, Geer teaches that during automatic recording of selected channels, a user has the option to start viewing the program at the beginning of the program before the recording has completed by using buttons 1430 and 1450 to select a desired program and then pressing button 1410 to commence the reproduction. The programs as set by the program guide data start at either top half or the bottom half of the hour, the 00-th and 30-th minute, respectively, and therefore allows the user to jump back to the beginning of a TV program previous to the current time. It is clear that if the user wishes to watch a previously recorded show prior to the currently recording show, he will press

button 1450 twice before being able to view the recorded show, and therefore the nature of being able to reproduce a program at 00-th minute and the 30-th minute in an hour which is closer to the present time than the other is, is preserved. (See Fig. 9, Fig. 14, elements 1420, 1430, 1450, and col. 8, line 1 – col. 9, line 43)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the start of program retrieval as taught by Geer into Vallone's recording apparatus because it allows a user an easy and convenient way to retrieve the beginning of a recorded or a currently recording program.

Regarding claim 4, Vallone teaches a program-signal recording and reproducing apparatus as recited in claim 3, further comprising:

- a cache playback mode in which a program signal temporally continuous from past to now is always recorded on a recording medium while a prescribed amount is a limit, and an already-recorded portion of the program signal which is being recorded is reproduced (Vallone teaches in col. 19, lines 27-32 that when a user is watching live TV, the option to play a buffered/cached portion is available in the same manner as an instant replay operation in sports. The instant replay is a cache playback equivalent);
- a time shift playback mode in which, with respect to a program signal recorded on the recording medium on the basis of a record start timing decided by operation by a user (Vallone teaches in col. 17, lines 16-25 that the user can

instruct the system to record a particular program he or she is watching.

Recording of a program can also be recorded by way of scheduling as described in col. 23, lines 10-18), and an already-recorded portion of the program signal which is being recorded is reproduced (Vallone teaches in col. 15, lines 14-18 that a show either recorded (Fig. 17, elements 1702-1704 represent recorded shows) or currently recording (Fig. 17, element 1713 represents a program that is currently recording), can be viewed immediately by selecting the play button (Fig. 18, element 1801));

- and second head retrieval reproduction means for, when the program head retrieval command is performed by the head retrieval command input means, performing head retrieval reproduction of the program signal from the record start timing (Vallone teaches that by selecting the play button (Fig. 18, element 1801), the recorded program begins playback from the head/beginning of the program);
- wherein the head retrieval reproduction is performed by the first head retrieval reproduction means in the cache playback mode (as described above in claim 3 rejection), and the head retrieval reproduction is performed by the second head retrieval reproduction means in the time shift playback mode (as described above in claim 4).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gelek Topgyal whose telephone number is 571-272-8891. The examiner can normally be reached on 8:30am -5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gelek Topgyal
4/18/2006


THAI TRAN
PRIMARY EXAMINER